To: Bayer, MaryRose[Bayer.MaryRose@epa.gov]

From: Kumar, Chitra

Sent: Mon 2/23/2015 5:30:06 PM

Subject: RE: WY Info

Thank you for the succinct description.

Chitra Kumar

Acting Associate Chief, Prevention Branch

US EPA, Office of Ground Water and Drinking Water

Drinking Water Protection Division

202-564-2232

From: Bayer, MaryRose

Sent: Monday, February 23, 2015 12:27 PM

To: Cheung, Wendy

Cc: Minter, Douglas; Kumar, Chitra; Kobelski, Bruce; Kelly, Suzanne

Subject: RE: WY Info

Wendy,

We have been looking at this here and Douglas and Chitra have been engaged and looped in Ron, Sue and Bruce. I've cc'd Sue and Bruce so that they know you reached out. I'll also forward you their comments/read on the issue.

I acknowledge your read of the language you quoted below. I read it to say that if they choose to voluntary certify, that action/certification *itself* doesn't force them to get another type of permit. It doesn't, however, based on a plain reading of the language, close the door on other things triggering a requirement to obtain a permit under those sections (e.g., risk to USDWs; endangerment).

Additionally, and likely more important for EPA: Wyoming does not have an approved Class VI program. As such, the state has the right/authority/prerogative to do what they choose with respect to their "state-level-Class VI" approach. Any such operator (that is either Class II and posing risks that warrant transitioning OR going to inject as a Class VI from the start of the project) <u>must</u> also get a Federal Class VI permit and comply with Federal requirements until such a time that the state has applied for and received Class VI Primacy.

At such a time that Wyoming applies for and we are reviewing their Class VI Program application, regulations, and any governing legislation, we could take this issue up as being one of concern for us. If we raise it now, it could be raised as a courtesy/statement that this Bill could pose challenges to our coordination on any future Class VI Primacy application; and, as such, we encourage them to consider future challenges in the implementation of this Bill.

Regards,

Molly

Mary Rose Bayer Geologist, UIC GS Team Leader U.S. Environmental Protection Agency Office of Ground Water & Drinking Water: Prevention Branch Phone: (202) 564-1981

"ONE EPA. One Great Place to Work..."

From: Cheung, Wendy

Sent: Monday, February 23, 2015 12:05 PM

To: Bayer, MaryRose

Cc: Minter, Douglas; Kumar, Chitra

Subject: FW: WY Info

Molly,

The State of Wyoming has come out with a new bill regarding EOR – CO2 injection. The bill is only 2 pages long: http://op.bna.com/env.nsf/id/fwhe-9tvsdq/\$File/\$F0084(4)%20bill.pdf

Certainly it does contain language about certification for purposes of greenhouse gas reporting, but it also states:

"If there is production of oil, gas or both from enhanced recovery operations under a commission order.... An application or certification under this section does not subject the enhanced recovery operation to the requirements of W.S. 35-11-313 [CO2 Sequestration permit requirements] through 35-11-318 or require the operator to obtain a permit under those sections."

One can read this to mean that if there is ANY amount of production of oil/gas, the operation will not be subject to Class VI. I'm not sure if the intent of this bill is to draw that bright line on the Class II-CV transition point. Would you mind taking a look at this and provide us with your read on this?

Thanks, Wendy

From: Minter, Douglas

Sent: Monday, February 23, 2015 8:36 AM **To:** Cheung, Wendy; Bowling, Linda

Subject: FW: WY Info

fvi

From: Minter, Douglas

Sent: Monday, February 23, 2015 8:05 AM

To: Kumar, Chitra Cc: Hoskie, Sadie

1	Subject: RE: WY Info
	Thanks Chitra: we will keep you in the loop if there is anything UIC-related coming out of this meeting.
	Douglas
	From: Kumar, Chitra Sent: Friday, February 20, 2015 3:10 PM To: Minter, Douglas Cc: Bergman, Ronald; Green, Holly; Kobelski, Bruce; Bayer, MaryRose Subject: FW: WY Info
	Hello Douglas,
	Holly and Ron brought me into the loop on this issue. We have been looking into this article. Like you, we read the WY bill language to say that Class II rules still apply for ER even when they are claiming credit for CO2 sequestration, and this may be more of a GHG reporting issue for OAR than for us.
-	We are very interested in the outcome of your meeting on Monday. Have a great weekend!
ı	Chitra
:	
1	Chitra Kumar
	Acting Associate Chief, Prevention Branch

US EPA, Office of Ground Water and Drinking Water

Drinking Water Protection Division

202-564-2232

From: Green, Holly

Sent: Friday, February 20, 2015 12:16 PM

To: Kumar, Chitra Subject: FW: WY Info

Hi Chitra,

This note is in response to that WY article this morning. If we have a message here, we should probably share it w/ R8.

Holly Sage Green

Acting Chief, Prevention Branch

EPA Office of Ground Water and Drinking Water

1200 Pennsylvania Ave. NW, Washington, DC 20460

(202) 566-0651

From: Minter, Douglas

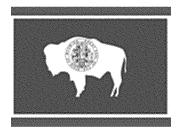
Sent: Friday, February 20, 2015 11:11 AM

To: Green, Holly Subject: FW: WY Info

Hi Holly: FYI as it (may?) relate to Class II to VI. My initial take is that Class II regulation would still be appropriate as long as there is an EOR component to injection. I will let you know if any new information, etc. comes from my meeting next Monday.

Cheers,
Douglas
From: Videtich, Callie Sent: Friday, February 20, 2015 8:47 AM To: Hoskie, Sadie; Minter, Douglas Cc: Daly, Carl; Farris, Laura; O'Connor, Darcy Subject: FW: WY Info
Sadie, Douglas, Dee and Carl:
Please take a look at this and lets discuss potential issues after the Program Manager meeting on Monday (10:00 ish).
Thanks
Cal
From: Card, Joan Sent: Friday, February 20, 2015 8:32 AM To: McGrath, Shaun; Thomas, Deb; Videtich, Callie; Hestmark, Martin; Beeler, Cindy; Daly, Carl; Strobel, Philip; Farris, Laura Subject: WY Info
Oil & Gas
Wyoming Lawmakers Mull Bill to Certify

Carbon Storage Used in Oil Recovery



By Tripp Baltz

Feb. 19 — A Wyoming legislative committee has approved a bill (S.F. 84) that would provide for the state to certify the quantity of carbon dioxide stored incidentally in certain oil and gas production activities.

The House Minerals Committee approved the bill Feb. 18 on 8-0 vote and recommended approval in the full House, where the bill is now pending. The Senate approved the bill Feb. 5 on a 26-1 vote, and the governor is expected to sign it.

The legislation would establish a new process authorizing the Wyoming Oil and Gas Conservation Commission to issue orders recognizing and certifying permanent underground storage of captured carbon dioxide during enhanced oil recovery operations. It could affect companies such as Anadarko Petroleum Corp. and Denbury Resources Inc.

Pumping Pressurized Carbon Dioxide

Oil producers use enhanced recovery to pump pressurized carbon dioxide into the earth surrounding an oil well, Michael Von Flatern (R), sponsor of the measure, told Bloomberg BNA Feb. 19. Under the bill, enhanced recovery would not be subject to existing state laws regulating underground sequestration of carbon, he said.

"That's a problem," Jill Morrison, organizer with the Powder River Basin Resource Council, an environmental group based in Sheridan, told Bloomberg BNA Feb. 19. She said the bill would provide an exemption from Wyoming rules governing carbon sequestered through enhanced oil recovery.

Wyoming's existing geologic sequestration laws were developed from 2007 to 2010 to prevent carbon leaks and contamination of drinking water supplies, she said.

Wyoming's carbon sequestration rules apply at the cessation of oil and gas operations, and they are geared to accomplish one of two outcomes: the conversion of a site to underground sequestration, which is then regulated by the Wyoming Department of Environmental Quality, or the plugging and abandoning of applicable wells under oil and gas commission rules.

Use of Valuable Resources

Von Flatern said the bill is designed to encourage the use of valuable carbon dioxide resources that might otherwise be stranded. He said Wyoming Gov. Matt Mead (R) supports the bill and will sign it, viewing it as "good economic development" for the state.

Morrison said the bill is being promoted by Denbury Resources, a Plano, Texas-based oil and gas operator, and is unnecessary since Wyoming rules already "protect public safety, health and the environment from carbon dioxide leaks."

Greg Schnacke, executive director of governmental relations for Denbury, told Bloomberg BNA Feb. 19 that having state-certified carbon dioxide injection will support the financial requirements that future projects need by providing a method for proof of regulatory compliance.

Denbury contributed \$2,000 to Mead's 2014 reelection campaign, according to the National Institute on Money in State Politics. Mead serves on the Wyoming Oil and Gas Conservation Commission. Denbury also contributed \$500 to Rep. Tom Lockhart (R), chairman of the House Minerals Committee, the institute said.

The bill also would cover Anadarko Petroleum Corp., which has employed enhanced oil recovery in Wyoming, Morrison said.

Joan Card | Senior Policy Advisor

Office of the Regional Administrator

USEPA Region 8 (CO, MT, ND, SD, UT, WY)

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